Poor Institutions and Private Incentives:
Evidence from Dividend Policies

Jie Gan, Ziyang Wang[1,2]

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Abstract

The existing literature on law and finance generally assumes that firms are passive recipients of the influence of investor protections on their ability to raise external financing. This view ignores the role of private incentives. In this paper, we empirically identify a commitment mechanism, i.e., dividend payouts, which firms use to establish a reputation for better treatment of outside shareholders in order to compensate for country-level weak protection of shareholders and to obtain better access to equity markets. We show that, in weak-protection countries, firms with growth prospects tend to initiate dividends earlier and pay a higher level of dividends not only as compared to their counterparts in strong protection countries but also as compared to low-growth firms in the same legal regime. As evidence of better access to capital markets, in weak-protection countries, growth firms with a good dividend history (e.g., three years of consistently high dividend payouts) attain higher stock market valuation and raise more equity financing.

Introduction

A considerable literature has accumulated over the years emphasizing the importance of investor protection in determining a country's financial development and its firms' access to external financing. Where laws are protective of outside investors and well enforced, investors are willing to provide more financing to firms at lower costs. As a result, financial markets are broader (La Porta et al., 1997, 1998) and less volatile (Johnson et al., 2000), more firms are listed (La Porta et al., 1997), and listed firms become larger and more valuable (Kumar et al., 1999, Demirgüç-Kunt and Maksimovic, 1998, and La Porta et al, 2002). Legal protection of investors also shapes external finance through its impact on firms' financing choices (Demirgüç-Kunt and Maksimovic, 1999), contracting terms when they raise financing (Qian and Strahan, 2007, and Bae and Goyal, 2009) and use of trade credit (Fisman and Love, 2003).

An underlying presumption in the existing literature is that firms are mostly passive recipients of the influences of weak investor protection. For example, when external financing is not readily available, firms may simply stop growing before they reach their attainable size, or they may respond by shifting from long-term financing to short-term financing that relies less on contract enforcement. This view ignores the role of private incentives and thus rules out the possibility that, under certain circumstances, firms might take actions to credibly commit to good governance practices to mitigate the negative impact of weak investor protection at the country level. In this paper, we take issue with this conventional view and explore the role of private incentives in mitigating country-level poor institutions, so that firms could realize their growth potential. A set of important empirical questions immediately emerge. Through what specific mechanisms could firms make their commitment to good governance credible, in order to

convince the capital market and obtain the financing they need? And when they do, what are the associated costs of making such credible commitment?

The theoretical possibility that firms may commit to treating minority shareholders well for the purpose of selling equity in the future was first pointed out by Gomes (2000). Despite its importance, this theoretical predication has never been systemically tested. In this paper, we provide empirical evidence of one particular commitment mechanism that firms use to establish a reputation for good treatment of shareholders. Specifically, we show that in countries where legal protection of shareholders is weak, firms with good growth prospects establish capital-market reputation through commitments to generous dividends so that they can gain better access to the equity market in the future.

While the original model in Gomes (2002) does not consider growth or a need for external equity financing as the motivation for better governance,[3] we believe that the private incentive to commit is the greatest in firms with growth prospects. Further, dividend qualifies for a credible commitment, for two reasons. First dividend payouts bring potential benefits of lowering financing costs if the market is convinced that the firm will use the proceeds for profitable investment opportunities. Anecdotal evidence suggests that emerging markets investors do appear to appreciate dividends. In an interview with CNN on May 2, 2012, Carlson Block, founder of Muddy Waters Research who achieved fame (and rich) by exposing accounting fraud by US-listed Chinese companies, rated dividend as the "No. 1 criteria" for identifying stocks in emerging markets to buy for the long term. Second, dividend is costly, because paying out profits as dividends reduces the opportunity for expropriation. It is

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[3] In Gome's model, the manager is initially the sole owner of the firm. In each period, he decides how many shares to sell and how much of the earnings to expropriate, taking into consideration the tradeoff between the gain from expropriation and the reduced price he will attain for his remaining ownership. In equilibrium, the manager holds a concentrated equity ownership to provide a guarantee for not expropriating minority shareholders.

particularly costly to low-growth firms located in countries with weak legal protection of shareholders because in these countries it is easier for insiders to expropriate corporate profits and because low-growth firms benefit less from the greater availability of external financing.

Our empirical analyses are based on a sample of 17,483 firms in 40 countries during the period 1985-2005. As the first piece of evidence of a commitment mechanism, we find that, in a duration model, sales growth has an accelerating effect on dividend initiation in countries where investor protection is weak, indicating that sales growth prompts firms to initiate dividends earlier. Moreover, growth and equity-dependent firms pay a higher level of dividends than their counterparts in countries with strong investor protection. There is also evidence that, in weak protection countries, high-growth and equity dependent firms pay more dividends even as compared with low-growth firms; a result in sharp contrast to the conventional wisdom and findings from countries with strong legal protection such as the U.S.[4] As evidence of the benefit of the commitment mechanism, we show that, in countries with weak investor protection, growth firms that consistently pay more dividends actually raise more equity financing, consistent with a better access to equity markets but against the conventional wisdom that firms pay out more dividends when they have less need for capital. Finally, growth firms in low protection countries would be able to obtain significantly higher stock market valuation after they have established a good dividend history, consistent with a lower cost of external financing. As discussed in details in Section IV, the costs and benefits of the commitment mechanism are all of economically substantial magnitude.

The main identification concern in cross-country studies is that the results may be driven by unobserved country characteristics. In the current setting, there could be change in tax laws or

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[4] See Allen and Michaely (2003), for an excellent survey of empirical findings, as well as theoretical models, about corporate payout policies.

financial liberalization which changes the marginal preferences for dividends and/or the availability of external financing. These country-level characteristics are time varying and thus cannot be controlled for by simply including country fixed-effects. We deal with this problem by including country-year fixed effects (i.e., 840 interactions of country- and year- dummies) and thus fully control for both time-invariant and time-varying country-level characteristics. As a result, our study has an important advantage over some previous cross country studies in that our inferences are based on within-country differences over time and across firms, through interactions of country-level characteristics (i.e., investor protection) and firm characteristics.

The idea that dividend policies can address the agency problems between corporate insiders and outside shareholders is not new. Easterbrook (1984) suggests that, by paying out dividends, firms need to come to capital market to raise external funds in the future and thus gives outsider investors an opportunity to exercise some control over the insiders at that time. Such an agency explanation of dividends, however, leaves an important question unanswered. That is, if managers want to invest in pet projects or divert corporate resources, what would prompt them to voluntarily commit to an action that will prevent them from doing so? The empirical evidence in this paper indicates that managers care about their ability to raising external capital to finance future growth opportunity and it is in their own interest to commit to better governance practices and thus gain access to capital markets. Moreover, the reputation for better treatment of outside investors is particularly valuable when the country's legal protection of investors is weak.

The findings that growth firms pay more dividends to mitigate the impact of weak investor protection on their access to capital markets complement the "outcome" view of dividends proposed by La Porta et al (2000) (LLSV, 2000 hereafter). In an important

contribution, LLSV (2000) argue that dividend payouts cannot be taken for granted, and that investors must use their legal powers, if any, to extract dividends from firms. Consistent with this view, they show that dividend payouts are generally lower in countries with weak investor protection. Facio et al (2001) further document that, in Eastern Asian and Western European countries and among group-affiliated firms, when there is greater divergence between large shareholders' control rights and cash flow rights and when the firm is "loosely affiliated" to a business group.[5] These findings, however, do not rule out the possibility that firms with good growth prospects may intentionally pay more dividends to establish a capital-market reputation when legal protection of outside investors is weak.[6] In fact it is precisely when investors do not have the legal power to force firms to pay more dividends that equity market financing is hindered and a reputation for commitment is necessary.

A number of our results, however, are difficult to explain with an outcome story. For example, in weak protection countries, compared with low-growth firms, high-growth firms initiate dividends earlier, and, when they are equity dependent, they pay a greater amount of dividends. Moreover, growth firms that pay more dividends actually raise more equity financing subsequently. If shareholders use their legal power to extract dividends to overcome agency problems, they should extract fewer dividends from firms with good growth prospects and thus less severe agency problems. They should extract even less dividends if the firms are expected to raise external financing in the near future because, to the extent that external financing is more

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[5] Loosely affiliated firms are those affiliated to a business group through a chain of control rights in which the control links are all above 10 percent but not all above 20 percent of the control rights.

[6] There are two other studies that use international data to study payouts. Denis and Osobov (2008) use data from six major countries from 1989 to 2002. They find that the likelihood of paying dividends is negatively related to growth opportunities in common law countries which is consistent with the findings in LLSV (2000), but positively related to growth in civil law countries, which as we will argue later, is more consistent with our reputation building story. Using data from 15 nations in the European Union from 1989 to 2005, Eije and Megginson (2008) examine both cash dividends and repurchases. They find that, similar to the US trend, the fraction of firms paying dividends declines but total dividends paid increases and repurchases also increase. Moreover, financial reporting frequency is associated with higher payouts.

costly than internally generated funds, dividend payouts increase the overall cost of financing which is borne by all shareholders.

The empirical evidence that firms may establish capital-market reputation to mitigate the impact of weak country-level investor protection does not, by any means, refute the importance of investor protection in shaping firms' financing policies. On the contrary, it is precisely the external financing environment as determined by legal protection of investors that prompts firms to establish reputation. Further, reputation building is costly. In the case of dividends, firms must substitute more expensive external financing for relatively cheaper internal funds. These costs are the consequence of weak protection of outside shareholders. More importantly, the finding that firms can actively build reputation to compensate for weak investor protection fills a gap in our understanding of the interplay between institutional factors and firm-specific governance. It also explains why, given weak institutions, minority investors are willing to supply capital at all. Here, lies the main contribution of our paper.

This paper also contributes to our understanding of dividend policy. The results suggest that some of the well-known empirical patterns in the US data may not be generalized to other countries, especially those with different legal protection of shareholders. More specifically, the US results that dividend payers are low-growth firms and that firms pay more dividends when they need less external capital do not hold well in weak-protection countries. In these countries, the need for (costly) reputation building plays an important role in determining corporate dividend policy.

Our study is close in spirit to work by Durnev and Kim (2005). Using cross-sectional data on quality of corporate governance, they find that there is significant within-country variation in

corporate governance quality.[7] Firms with better investment opportunities, higher ownership concentration, and greater need for external financing practice better governance and firms with better governance are valued higher. What distinguishes our work is that we focus on reputation building which is a dynamic process (including dividend history and subsequence equity issuance and valuation), while they use one cross-section of governance data due to data availability. Another difference is that their data is available for the largest firms from 27 emerging markets (close to 450 firms in total in the final sample), while we examine all the Worldscope firms that pass the usual screening. Compared to the largest firms, this sample is likely to be more affected by institutional weaknesses.

Our study is also related to studies examining the bonding hypothesis of international cross-listing. This hypothesis, first put forth by Coffee (1999 and 2002), Stulz (1999) and Reese and Weisbach (2002), states that a US listing enhances the protection of investors and thus can serve as a commitment to assure minority shareholders that they are less likely to be exploited. The main difference between our paper and this line of research is that bonding through cross listing is essentially "importing" of legal and governance institutions from a foreign country, whereas reputation building in our setting emphasizes the possibility to commit to good governance practices to substitute (imperfectly) for a lack of legal institutions within the *same* country.

The rest of the paper proceeds as follows. The next Section develops our testable hypotheses. Section 2 describes the data and empirical measures. Section 3 presents the empirical analysis. Section 4 presents a conclusion.

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[7] The governance score is from Credit Lyonnais Securities Asia (CLSA). The authors also use S&P disclosure quality, which is a governance variable in a broader sense, as a robustness check.

I. Empirical Design: Hypotheses and Identification

1.1 Hypothesis Development

We now develop testable hypotheses to provide structure to our empirical analysis. To systematically document a commitment mechanism, one needs to show (1) that costly commitment is undertaken, which, in the current setting, is dividend payouts by firms in need of financing in weak investor protection environments; and (2) that the benefit of the commitment, i.e., greater access to equity financing, actually occurs.

In countries with weak protection of investors, external financing is generally less available than in strong-protection countries. We expect growth firms to pay more dividends in order to establish a reputation for fair treatment of shareholders because they are in greater need of financing. Empirically, given that growth firms generally pay fewer dividends than mature firms, this implies a less negative relationship between firm growth and dividend payouts in weak protection countries. Based on these arguments, our first hypothesis is:

Hypothesis 1
Growth firms in countries with weak legal protection of shareholders pay more dividends than their counterparts in countries with strong protection. That is, the relationship between firm growth and dividends is less negative in weak-protection countries.

This hypothesis can be tested by estimating the below model:

$$DIV\ Ratio = \text{a} + \text{b } Sales\ Growth\ Decile + \text{c } Sales\ Growth\ Decile * Low\ Protection$$
$$+ \text{d } X + Country\text{-}Year\ Dummies + Industry\text{-}Year\ Dummies + e, \quad (1)$$

where *DIV Ratio* is either the dividend-earnings ratio or the dividend-sales ratio. *Sales Growth Decile* is defined based on the past five-year real sales growth as in LLSV (2000). *Low Protection* is a dummy variable indicating low investor protection countries and is measured based on civil law countries or the anti-self-dealing index. X contains control variables,

including size (defined as the log of assets), leverage, and profitability (defined as ROA).[8] *Country-Year Dummies* are interactions of country and year dummies to fully capture country-level changes over time that might affect dividend preferences or the availability of external financing, including tax law changes, financial liberalizations, changes in security market regulation, etc. Similarly, we include interactions of industry and year dummies to fully capture industry-level changes over time, such as technological progress and industry deregulation which may affect financing needs or dividend preferences. Industry classification is based on 2-digit SIC codes assigned by Worldscope. The conventional wisdom says that b is negative, that is, high growth firms tend to pay less dividend. Our main coefficient of interest is c, and c is expected to be positive.

We note that, while the above hypothesis, if confirmed, supports reputation building, it is also consistent with an outcome-based explanation as in LLSV (2000). The argument is as follows. Investors use their power to extract dividends. In strong protection countries, they extract more dividends when growth prospects are low and thus the agency problem is more severe; whereas in weak protection countries, shareholders may try to get whatever they can immediately or perhaps they cannot get much from either type of firms (high grow or low growth), resulting in a less negative relationship between growth and dividends (LLSV (2000)).

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[8]Recent literature on U.S. dividend policy has emphasized the importance of the role of firm life cycles, which is measured as the mix of earned and contributed capital (RE/TE) (DeAngelo, DeAngelo, and Stulz (2006)). We note that this measure may not apply to our current setting, because RE/TE depends on firms' decisions in both paying dividends and raising equity capital. Suppose there are two firms at the same stage of life cycles, one has good growth prospects and one does not. In low protection countries, the high-growth firm pays dividend and use the established reputation to raise equity financing. Then its measure of RE/TE would be lower and, given that dividends are "smooth", dividend payouts would be higher. This results in a mechanical relationship that in low protection countries firms in early stages pay more dividends, even if the two firms are at the same life-cycle stage. Similarly, firms with recent equity financing would have a lower RE/TE. Since equity financing is lumpy (firms issue equity once in a few years), recent issuers may not issue again in the next a few years, mechanically resulting in a positive relationship between RE/TE and equity issuance proceeds. Nevertheless, to check robustness and to be consistent with the previous literature, we include RE/TE in our estimation and none of the results change (unreported).

Thus differences across legal protection regimes alone cannot completely differentiate our story from an outcome-based story.

A sharper prediction comes from differences between high and low growth firms *within* the same legal protection regime. To fix ideas, let us consider a growth firm in a country with weak investor protection. Compared to a firm without good growth prospects, it has a greater incentive to establish capital-market reputation in order to have access to external financing, by paying more dividends. On the other hand, as a growth firm, each dollar of internally generated funds has a better current use if it were kept in the company. Thus it is unclear whether, in weak protection countries, a high-growth firm would pay more dividends compared to a low-growth firm. However, if we do find that growth firms actually pay more dividends than low-growth firms in countries with weak protection of outside investors, it would be against the conventional wisdom and thus provide strong support for our reputation-building hypothesis. It would also be inconsistent with an outcome-based explanation of dividends because if shareholders use their power to extracting dividends, they should extract fewer dividends when the firm has greater growth opportunities and thus faces less agency problems. Moreover, in our empirical tests, we are most likely to find this pattern among growth firms that are more equity-dependent, because their incentive to build reputation is the strongest. Hence, we pose the following hypothesis:

Hypothesis 2
In countries with weak legal protection of shareholders, growth firms, particularly when they are equity dependent, pay more dividends than do low-growth firms. That is, in low protection countries, the relationship between sales growth and dividend payouts is positive for high-growth and equity dependent firms.

Hypothesis 2 implies that the sum of coefficients *b* and *c* in Equation (1) would be significantly positive.

The above two hypotheses establish the first part of a commitment mechanism, that is, costly actions are taken. The following hypotheses help us test the second necessary condition of a commitment mechanism, that is, the benefit of the costly action is actually attained. In particular, in weak protection countries firms with a good dividend history (e.g., consistently high dividend payouts), should be able to raise more capital in the public equity market compared to their counterparts in countries with strong investor protection. Moreover, a good dividend history is more valuable for high-growth firms and equity-dependent firms from countries with weak investor protections in helping them to raise capital. Given that dividend-paying firms should generally need less capital, we have the following hypothesis:

Hypothesis 3
(3a) A good dividend history allows firms in low protection countries to raise more equity financing than do firms in high protection countries. That is, the relationship between a good dividend history and equity financing is less negative in low protection countries.
(3b) A good dividend history allows growth and equity dependent firms to raise more equity financing in low protection countries than their counterparts in high protection countries.

We test Hypothesis 3 by estimating the following model:

*Issuance = a + b 3-Year High Dividends +d 3-Year High Dividends * Low Protection * Sales Growth Decile + f X + Country-Year Dummies + Industry-Year Dummies +e,* (2)

where the dependent variable, *Issuance*, is the subsequent three-year average equity issuance proceeds normalized by the market value of equity at the end of the current year. *3-Year High Dividends* is a dummy variable equal to one for firms with a dividend payout ratio consistently above the industry median in the country for each of the previous three years. *X* contains standard controls, including firm size, ROA, and leverage. Our main coefficient of interest is *d*, which is expected to be positive.

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Another question that arises is whether, in weak protection countries, firms with a good dividend history actually raise more capital than firms without a good dividend history. According to the conventional wisdom from the U.S. experience, they should not, because in countries with strong investor protection, dividends are generally paid by firms that are in less need of external financing. However, if we find that they do, it would be a strong support for our reputation-building story. Again, we are most likely to find this pattern for high-growth, equity-dependent firms whose incentive to establish capital market reputation is the strongest.

Hypothesis 4
In low protection countries, growth firms with a good dividend history raise more subsequent equity financing. That is, the relationship between a good dividend history and subsequent equity financing is positive for growth firms in low protection countries.

Hypothesis 4 implies that the sum of coefficients *b* and *c* in Equation (2) is significantly positive for high growth firms.

To the extent that firms can use reputation as a substitute for weak investor protection, we expect the benefits of reputation building to be manifested in higher market valuations for these firms, which leads to the following hypothesis:

Hypothesis 5
In low protection countries, a good dividend history is associated with higher market valuations for high-growth and equity-dependent firms.

We estimate the following model:

Tobin's Q = a + b *Dividend History* + c * *Sales Growth Decile* + d *Low Protection * Sales Growth Decile* + e *Low Protection * Sales Growth Decile* Dividend History* + *f X* + *Country-Year Dummies* + *Industry-Year Dummies* +*e*,   (3)

where *Dividend History* is a dummy variable indicating firms with good dividend history, as defined later. *X* contains standard control variables, including size (defined as the log of assets),

leverage, and research and development expenditures.[9] The main coefficient of interest is *e* and this coefficient is expected to be positive.

1.2   Identification Concerns

A common criticism of cross-country studies of law and finance is that the research only shows correlation, not causality, because country-level institutional factors may simply proxy for something else. Most importantly, in the current setting, during the 21 years of our sample period, country characteristics may have changed in ways that affect dividend preferences or the availability of external financing, or both. For example, it is possible that countries have changed their tax laws, which would affect the relative advantages of dividend vs. retained earnings (or (repurchases, the other form of payout). Or, they may have taken measures to liberalize their financial markets or introduce new capital market regulations, which would change the incentive to pay dividends and/or the availability of external financing. To deal with these concerns, in Equations (1)-(3), we include country-year fixed effects (by adding 840 country-year dummies) to fully capture both time-invariant and time-varying country-level characteristics. Thus our study has an important advantage over many other cross-country studies in that we make our inferences through within-country differences across different sets of firms based on the interaction between country-level characteristics (i.e., investor protection) and firm characteristics. As a result, we mitigate concerns that our results are driven by omitted variable bias or model specification.

A second concern may be that we do not examine share repurchases, an alternative to paying dividends. We first note that the focus of our paper is on the role of dividends as a commitment mechanism, rather than on payout policy *per se*. In fact, dividends can act as a

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[9] Fama and French (1998) use many more controls. Our results (unreported) are robust to including additional controls.

stronger commitment device, because management is more committed to maintaining a stable dividend policy than a stable repurchase policy (see, e.g., Allen and Michaely, 2000).[10] More importantly, repurchases would affect our results only if both of the two following conditions are met: (1) repurchases are substitutes for dividends; and, given that our main results are about the differences between low and high growth firms across the two legal regimes, (2) high-growth firms in strong protection countries are more likely to substitute repurchases for dividends.

Existing empirical evidence suggests that neither of the two conditions seems to hold. First, there is evidence that dividends and repurchases are complements in the international setting, as argued in LLSV (2000). For example, share repurchases are most common in countries with high dividends, with US accounting for 72% of world share of repurchases in 1997-98 and US, UK, Australia combined accounting for 83%. In some civil law countries, where dividends are generally meager, repurchases are even illegal or heavily taxed (The Economist, August 15, 1998). More detailed analysis in the US confirms this observation: "the primary effect of repurchases is to increase the already high cash payouts of dividend payers" (Fama and French, 2001). Second and consistent with the observation that repurchases are in the province of dividend payers, several studies have shown that low-growth firms tend to repurchase more (Allen and Michaely, 2003). Therefore, repurchases are not likely to drive our results. On the contrary, to the extent that dividends and repurchases are complements and that low-growth firms are more likely to repurchase, our results tend to underestimate the extent to which firms use payout policy (i.e., both dividends and repurchases) to establish capital market reputation.

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[10] In our sample, dividends are similarly smooth in both legal protection regimes: while the chance for a firm to decrease dividends by 10% is slightly higher (10.7%) in low protection countries than in high protection countries (8.5%), the difference is not economically significant, especially considering that earnings in emerging markets tend to be less persistent (Glen, Lee, and Singh (2003).

A third identification concern is that there might be systematic differences between firm growth in high- and low protection countries. Particularly, if low-growth firms in high protection countries actually grow faster that those firms in low protection countries, then it is not a surprise that they pay less dividends. This alternative interpretation implies that if we rank firms in the whole sample and within the two legal regimes separately, the decile ranks would differ systematically: low-growth firms in high protection countries would have higher rank in the whole sample. We find that this is not the case. The two sets of decile ranks are in fact highly correlated. When investor protection is measured based on common vs. civil laws, the correlation is 0.978 for high protection countries and 0.944 for low protection countries; furthermore, in 96% of the cases, the differences between the two sets of ranks are within one rank difference (e.g., for a decile rank of 3 in the protection-specific sample, we look at the % of cases in between ranks 2 and 4 in the whole sample). The correlation is similar with the other measure of legal protection. In our later analysis, we further mitigate this concern by defining sales growth decile based on the ranking in the whole sample.[11] Finally, it is worth pointing out that, while our results are not likely to be driven by differences in firm growth across the two legal regimes, we draw our conclusion not only based on dividend payouts across legal regimes, but we also examine dividend payouts within the same legal regime and subsequent equity issuance. The latter two analyses are not likely to be affected this alternative interpretation.

Finally, it's worth discussing how our results could be affected by a few additional factors that may influence firms' dividend policy. One such factor is the ownership structure. As pointed by Faccio et al. (2000), ownership structure, and more specifically, divergence between control rights and cash flow rights and group affiliation may affect agency problems and thus

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[11] The results are very similar if we follow LLSV (2000) and define growth deciles within legal regimes, which is not surprising given the high correlation between the two definitions.

dividend policy. We do not believe that unobserved ownership drives our results. This is because it affects our results only if ownership is systematically related to firm growth in high and low protection countries and it cannot explain why firms with good dividend history tend to issue more equity subsequently. Another consideration is that firms may use other mechanisms to signal its commitment to shareholder rights. For example, they may increase transparency, choose a more credible auditor, and enhance the reliability of accounting numbers by using conservative accounting. The possibility that firms may use alternative mechanism does not negate the reputation building hypothesis. If anything, it would only bias against our findings of reputation building through dividends. But evaluating the relative costs and benefits of the alternative mechanism is beyond the scope of the present paper.

II.   The Data and Empirical Measures

2.1.1   *The Data*

Our sample is constructed using Worldscope data and following the procedure in LLSV (2000). Specifically, we first eliminate firms in socialist countries and in Luxembourg; firms listed in countries with mandatory dividend policies;[12] financial firms; firms completely or partially owned by the government (identified by the footnote to the data item Common Shares Outstanding in Worldscope).[13] We then exclude firm-years without consolidated balance sheets, with negative net income or negative cash flow, with missing dividend data or missing sales, net income, or cash flow data, with dividends exceeding sales. Finally, we drop firms that do not

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[12] In our initial sample screening we follow LLSV (2000) and drop five countries (Brazil, Chile, Colombia, Greece, and Venezuela) that had mandatory dividends in 1996. Since we do not have information on mandatory dividends over time, in all our estimation, we include country-year dummies to fully control for country-level changes over time, including changes in rules regarding mandatory dividends.

[13] We identify firms with government ownership and later firms not publicly traded by examining the footnote to the Data Field 05301: Common Shares Outstanding. This footnote, when available, indicates whether the firm is a privately owned company, a cooperative company / consortium / partnership, a government owned company or majority owned by government, or a mutual insurance company.

appear to be publicly traded (again based on the footnote to Common Shares Outstanding). In addition to the Worldscope data, we obtain seasoned equity issuance data from Securities Data Corporation (SDC).

Our sample period is from 1985 to 2005. We begin in 1985 because Worldscope covers firms beginning in 1981 and we require firms to have five years of net sales data to compute the sales growth rate. Our sample ends in 2005 because we need three years of data to examine subsequent equity issuance and the latest year of data available to us is 2008. Our final sample consists of 21 years of data for 17,483 firms from 40 countries.

2.2   Key Empirical Measures

2.2.1   Investor Protection

We use two proxies for protection of minority shareholders. The first is, as in LLSV (2000), based on whether the Company Law or Commercial Code of the country is English Common Law or originates in Roman Civil Law. In general, common law countries have stronger legal protection of minority shareholders than do civil law countries. Our second proxy for investor protection is the anti-self-dealing index based on the contribution of Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008). It measures the strength of minority shareholder protection against expropriation by the controlling shareholder. It is meant to improve on the anti-director-rights index in LLSV (1998) and addresses the ways in which the law deals with corporate self-dealing in a more theoretically grounded way. A higher index indicates stronger investor protection. We define low protection of shareholders rights using values of the anti-self-dealing index lower or equal to the median (0.45) across countries.

2.2.2 *Dividend payouts*

In our main analysis, we use two measures of dividend payouts. One is the most commonly used measure, the dividend-earnings ratio, where earnings are measured after interest and taxes but before extraordinary items (LLSV 2000 and Faccio et al., 2001). Earnings-based payout ratios, however, can be noisy for two reasons. First, earnings depend on a country's accounting conventions and may not be easily comparable across countries. Second, earnings can be manipulated. Third, diversion of resources may affect reported earnings, resulting in an overestimation of dividend payout. To the extent that expropriation is likely to be less prevalent in growth firms -- for example, the cost of expropriation in high-growth firm is greater because the value of foregone investment opportunities is higher – this problem biases against our findings. Nevertheless, in order to guard against these problems, we follow the previous literature and use the dividend-sales ratio as an alternative measure of dividend payouts.

The prior literature has also used dividend-to-cash-flow ratio as an alternative measure of dividend payouts. When we use this measure as a robustness check, we obtain very similar results.[14] In the interest of brevity, we do not report these results in the main paper. Sometimes, dividend-to-market-capitalization ratio is also used as a measure of payout policy. In our setting, our main focus is on how growth firms may use dividend payouts to establish reputation so that they can raise financing at a best price. Consequently, both the numerator and the denominator of this measure would be affected. Therefore we do not use this variable to measure dividend payouts. Rather, we examine dividends and valuation separately in our analysis.

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[14] They are available upon request.

2.2.3 *Subsequent equity issuances*

For each year, subsequent issuances are measured as the average issuance proceeds in the following three years normalized by the market value of equity at the end of the current year. We use the three-year average of equity issuance proceeds to smooth out noise and to account for any time lag between dividend payments and establishment of reputation. When calculating the equity issuance proceeds, we only consider public offerings and exclude private placements because, according to our hypothesis, firms pay dividends in order to ease minority shareholders' concerns about expropriation. Buyers in private placements are typically large investors, such as banks and institutional investors, and may be able to exert more effective monitoring and discipline (Hertzel and Smith (1993), and Wruck (1989)).

We note that firms can raise equity financing through seasoned public offerings and rights offerings. Both are relevant to our story: a good reputation should allow firms to attract more investors in public offerings and to give existing shareholders more incentives to subscribe to rights offerings. Thus we include both public offerings and rights offerings in our analysis. We also check the robustness of our results by including public offerings only and the results remain strikingly similar.[15]

2.2.4 *Equity Dependence*

We follow Rajan and Zingales (1998) in constructing a measure of equity dependence. Specifically, for each industry-year, equity dependence is defined as the industry aggregate net proceeds from equity sales during the previous ten years normalized by industry aggregate capital expenditures. This measure is computed using U.S. firm-level data from Compustat. This approach assumes that, given that capital markets are relatively frictionless in the US, one could

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[15] In the interest of brevity, we do not report these results but they are available upon request.

identify an industry's technological demand for equity financing using US data and that such technological demand for equity financing carries over to other countries.

III. Empirical Analysis

In this section, we first establish that in countries where legal protection of investors is weak, growth firms pay more dividends, both as compared to their counterparts in strong protection countries and compared to mature firms from the same legal protection regimes (Hypothesis 1 and 2). Second, we show that in weak protection environments, growth firms with a good dividend history raise more equity financing (Hypothesis 3 and 4).

Before we present our main analysis, we report the summary statistics of the data. Table 1 displays the classification of strong vs. weak investor protection for the 40 countries in our sample. The correlation between the two measures of investor protection is 0.512. The summary statistics of the main variables used in our empirical analysis are presented in Table 2. Based on both the mean and the median, the dividends-to-net-income ratio in common law countries is significantly lower than that in civil law countries, a result that is inconsistent with LLSV (2000). The results, however, flipped when payout is measured as the dividends-to-sales ratio: it is higher in common law countries than in civil law countries. The pattern is similar when investor protection is measured based on Anti-self-dealing Index. We note that LLSV's results are based on a single cross-section of firms in 1996, whereas our sample is from 1985 through 2005. The contrasts in results suggest that aggregated data can hinder inference and we need to rely on our later regression analysis to draw conclusions.

In addition to dividend payouts, there is a substantial difference in sales growth between countries with Common and Civil law. For example, sales growth in Common law countries is

21% on average, whereas that in Civil law countries is only 12% (the median is 6.5% vs 3.7%). This raises the question as to how a systematic difference in sales growth between the two legal regimes might affect our analysis. That is, if a "high growth" firm in low protection countries is more like a medium growth firm in high protection countries, then it would not be surprising that high growth firms pay more dividends in low protection countries than in high protection countries (Hypothesis 1). To mitigate this concern, when we rank firms into growth deciles, we rank in the whole sample, rather than by legal origin, to ensure that sales growth deciles are comparable across legal regimes. More importantly, our strong evidence comes from a comparison of firms in different sales growth deciles within the same legal regime (Hypothesis 2). Finally, when investor protection is measured based on anti-self dealing index, the differences in sales growth between the two legal regimes are not substantial: they are negligible on average; firms in low protection countries have higher median sales growth but the difference is only one percentage point. As we use both measures of investor protection, we further mitigate the concern that systematic differences in sales growth may drive the results.

Finally, Table 2 shows that firms in common law countries tend to have greater profitability and equity dependence, and have smaller total assets and lower leverage. When we use the anti-self-dealing index to measure investor protections, we obtain similar results.

3.1   Firm Growth and Dividends

Table 3 summarizes dividend payouts across growth deciles for both strong and weak protection countries. Panel A of Table 3 shows that, while there is some non-monotonicity in the proportion of firms paying dividends as one moves from low-growth deciles to high-growth deciles, the *difference* in the proportion of dividend-paying firms between weak and strong protection countries increases progressively from low-growth deciles to high-growth deciles,

consistent with our later findings. The pattern is very similar when we examine the dividend payout ratio, in Panel B of Table 3.

3.1.1 Dividend initiation

In this subsection, we provide evidence that, in weak investor protection countries, growth prospects prompt firms to initiate dividend payments earlier. We estimate a Cox proportional hazard model as follows:

$$h(t) = h_0(t)*exp[Y], \text{ and}$$
$$Y= a + b \text{ } Sales \text{ } Growth \text{ } Decile + c \text{ } Sales \text{ } Growth \text{ } Decile * Low \text{ } Protection + d \text{ } X$$
$$+ Country\text{-}Year \text{ } Dummies + Industry\text{-}Year \text{ } Dummies + e, \qquad (4)$$

where $h(t)$ is the hazard rate that a firm pay dividends in year t given that it hasn't done so previously, $h_0(t)$ is the baseline hazard function. The dependent variable is coded as one if a firm begins to pay dividends in the given year and zero otherwise. Other variables are similarly defined as in Equation (1). A positive coefficient suggests an accelerating effect on dividend initiation and a negative coefficient suggests the opposite. The reputation hypothesis predicts that the coefficient b will be negative and c will be positive. In the Cox proportional hazard model, for each firm, only years up to and including the first dividend payment are used; if a firm never initiates dividends during the sample period then all years are used.[16]

The results are presented in Table 4. Sales growth enters with a negative sign (at the 1% level), implying that higher growth delays dividend payments. Consistent with the reputation hypothesis (Hypothesis 1), the interaction term between low investor protection and sales growth is significantly positive for both measures of investor protection (at the 1% or 5% levels),

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[16] If a firm already pays dividend at the beginning of the sample period, then this firm will not be included in the estimation. In our data, there are 12914 such firms with 83516 observations, resulting in a much smaller regression sample in Table 5 compared with those in other tables which utilize the whole sample.

suggesting that the decelerating effect of growth on dividend initiation is weakened in low protection countries. More importantly and consistent with Hypothesis 2, the sum of the coefficients on *Sales Growth Decile* and on the interaction term is significantly positive (with p-values of 0.059 and 0.086, respectively, for the two measures of legal protection). Thus, within countries with weak investor protection, sales growth prompts firms to initiate dividends earlier, a finding that is in sharp contrast to the existing literature based on U.S. data. Finally, as expected, larger and more profitable firms are more likely to initiate dividends.

Figure 1 plots the conditional probability of initiating dividends for firms from year 0 to 25 after entering the sample. The figure clearly shows that in countries with weak protection of shareholders, high-growth firms (in dashed lines) have a higher propensity to initiate dividends than low-growth firms (in solid lines) across all years, whereas the pattern is flipped in strong protection countries, where low-growth firms have greater propensity to initiate dividends.

3.1.2   Dividend payouts

We now examine how dividend payout ratios depend on growth and investor protection, by estimating Equation (1). The results are reported in Table 5. In columns (1) through (4) of Table 5, investor protection is measured as civil law vs common law countries, and in columns (5) through (7) we use the anti-self-dealing index. In columns (1) and (3), for both measures of dividend payout, the interaction terms between *Sales Growth Decile* and *Low Protection* are significantly positive (all at the 1% levels), whereas sales growth itself is significantly negative (at the 1% levels). Very similar results obtain in columns (5) and (7) of Table 5, where investor protection is measured based on the anti-self-dealing index. The results support our hypothesis that high growth firms in countries with weak investor protection pay significantly more

dividends than their counterparts in strong investor protection countries. In columns (2), (4), (6), and (8) of Table 5, we further test the hypothesis that, among those high-growth firms, when they are equity-dependent, they tend to pay more dividends. To this end, we include in our estimation a dummy variable indicating high growth (defined as growth decile above 5), as well as its interaction with *Low Protection* and *Equity Dependence Decile.*[17] The coefficient on the three-way interaction is significantly positive at the 1% levels, consistent with the greater incentive of equity-dependent firms to pay dividends to build reputation.

We now examine whether, in low protection countries, high growth and equity dependent firms actually pay more dividends than low-growth firms. As discussed earlier, a positive answer would be against the conventional wisdom and is strong evidence of reputation building. We first note that in columns (1), (3), (5), and (7) of Table 5, the sum of the coefficients on *Low Protection * Sales Growth Decile* and *Sale Growth Decile* is generally negative, indicating that similar to findings in US studies, high growth firms in low protection countries pay lower dividends compared to low growth firms (significant at the 1% level). Next we evaluate to what extent, if any, growth and equity dependent firms pay more dividends in low protection countries. Specifically, we ask above which decile of equity dependence would the sum of coefficients of *High Growth* and the interaction between *High Growth and Low protection* is significantly positive (columns (2), (4), (6), and (8)). We find that the cutoff decile of equity dependence is 6 for all four specifications.[18] That is, in weak protection countries, if a high-growth firm has an equity- dependence level at or above the 6th decile, it pays significantly more dividends than low-growth firms. We add a new row in Table 5 entitled "*Overall Impact of High Growth and*

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[17] In this estimation, we do not include Industry-Year dummies, since *Equity Dependence Decile* is an industry level measure. If we do, the significance level is weakened.

[18] Note that the cutoff is different across different columns. 6 is the minimum that would render the sum of coefficients positive for all four specifications. For example, 5 is sufficient for columns (2) and (6).

Equity Dependence in Low Protection Countries" and report the sum of coefficients on *High Growth* and 6 times the coefficient on *Low Protection*High Grwoth*Equity Dependence Decile* and its *p* value.

The signs of the control variables are consistent with the findings in the literature. Dividend payout is positively related to firm size and the ratio of retained earnings to book equity and is negatively related to leverage. We note that profitability has a negative sign when dividend payout is measured as dividend over net income, which is probably mechanical since net income is in the denominator of the dependent variable. Indeed, when dividend payout is measured as dividend over sales ratio, the coefficient of profitability is significantly positive.

To summarize, in countries with weak protection of shareholders, firms with good growth prospects initiate dividends earlier and generally pay more dividends as a proportion of their earnings or sales compared to firms in strong investor protection countries. More importantly, high-growth firms that are equity dependent pay a higher level of dividends compared to low-growth firms within the same legal protection regime. The findings support the view that dividend payments are used by these firms to establish a reputation for fair treatment of minority shareholders in order to allow them to raise capital on better terms. In the next sub-section, we provide evidence that a consistently good dividend history is indeed associated with more subsequent equity issuance.

3.2   Dividend History and Access to Equity Financing

We now investigate whether dividend payouts allow high-growth and equity dependent firms to gain access to the equity markets (Hypotheses 3 and 4). In Table 6, we first report the summary statistics of subsequent 3-year equity issuance for firms with good dividend history

across the two legal regimes. We use two measures of dividend history: one is three-year dividend payout ratio above the industry median for the country; the other is whether the firm increases dividends recently (in the previous year). As reported in Panel A1 of Table 6, in both legal protection regimes, among firms with a good dividend history, both the proportion of firms that issue equity and the average amount of issuance (normalized by market cap) are lower than those without a good dividend history. This is consistent with the conventional wisdom that firms pay out dividends when they have less external financing needs. However, when we look at the "Diff-in-diff" column, the difference in proportion of issuing firms and the issuance amount between firms with and without a good dividend history is significantly smaller in low protection countries. That is, consistent with our hypothesis, in low protection countries, firms with good dividend history tend to issue more equity than their counterparts in strong protection countries. The results are similar when we use alternative measures of dividend payouts (Panel A2) and alternative measures of good dividends history (Panels B1 and B2).

The multivariate analysis is based on estimation of Equation (2). In the baseline model (columns (1), (4), (7) and (10) of Table 7), *3-Year High Dividends* enters with a significantly negative sign, whereas the coefficient on the interaction between *3-Year High Dividends* and *Low Protection* is positive and consistently statistically significant at the 1% level. Thus, while firms generally pay more dividends when they need less capital, in countries with weak investor protection, a good dividend history is associated with more subsequent equity issuance than in strong protection countries. Since our particular focus is on whether high growth firms with a good dividend record are able to gain more access to equity markets when investor protection is weak, in columns (2), (5), (8), and (11) of Table 7, we include a three-way interaction between *Sales Growth Decile*, *Low Protection*, and *3-Year High Dividends,* as well as an interaction

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between *Sales Growth Decile* and *Low Protection*. The coefficient on the interaction between *Sales Growth Decile* and *Low Protection* enters with a significant negative sign, whereas the coefficient on *Sales Growth Decile* itself is significantly positive. Thus, while growth firms in strong investor protection environments generally raise more equity capital, growth firms in weak protection countries actually raise less equity capital, if they do not have a consistent dividend history. The coefficient on the three-way interaction is significantly positive (at the 1% or the 5% level), suggesting that when growth firms establish a good dividend history they can mitigate the negative impact of weak investor protection on their ability to access external capital markets.

More importantly, the sum of coefficients on the three way interaction and *3-Year High Dividends* are generally positive for high growth firms. For example, in column (2) of Table 7, the sum is positive for *Sales Growth Decile* above 6 (significant at the 1% level). Sales Growth Decile of 7 is the cutoff that renders the sum of the coefficients positive across all four specifications in columns (2), (5), (8), (11). In the "Overall Impact of High Dividend for High Growth firms in Low Protection Countries," we report the sum of the coefficient on *3-Year High Dividends* and on 7 times the coefficient on *Low Protection*3 Year High Dividend*Sales Growth Decile,* as well as the *p*-values. The results indicate that a good dividend record is positively related to subsequent equity issuance for high-growth firms from low protection countries. This result is, again, in striking contrast to the conventional wisdom that firms pay more dividends when they have less need for capital.

In columns (3), (6), (9), and (12) of Table 7, we further examine how equity dependence interacts with the effect of dividend commitments on access to equity financing. Similar to the results based on firm growth, in strong investor protection countries *Equity Dependence* is

associated with significantly more equity financing. When investor protection is weak, however, *Equity Dependence* firms raise less external equity capital unless they have established a consistent dividend history. This result is consistent with our hypothesis (Hypothesis 3b) that dividend commitments are particularly useful for equity-dependent firms.

As corroborating evidence, we also examine equity issuances of firms that recently increase their dividend payouts (in the previous year). According to the conventional wisdom, these firms are not likely to be capital constrained and should be less likely to subsequently raise new equity. If, however, firms in weak protection countries increase their payout ratios to signal fair treatment of minority investors, we would expect to see these firms subsequently raise more capital in the equity market. To examine this possibility we code a dummy *Recent Dividend Increase* indicating an increase in the dividend from the previous year. The correlation between the dividend increase measure and the 3-year-high dividend indicator is quite low (0.0762 for dividend-earnings ratio and 0.0775 for dividend-sales ratio), indicating that the two measures contain different information on payout policy. The findings using dividend increases as the measure of dividend history are reported in Table 8 and are qualitatively very similar to those reported in Table 7.

In all regressions, the control variables generally have the expected signs. Specifically, larger and more profitable firms raise less equity capital, and leverage enters with a positive sign, which appears to be consistent with the tradeoff theory of capital structure of capital structure — since we control for industry-year dummies, our leverage measure captures deviation from the capital structure of the industry mean.

3.3. Dividend history and firm valuation

In this subsection, we examine the relation between dividend history and firm valuation. If reputation building indeed allows firms to obtain more and lower cost financing then we expect these firms to be more highly valued in the market (Hypothesis 5). In estimating Equation (3), dividend history variable is measured based on dividend over sales, rather than dividend-earnings ratio. This is because, while a higher dividend-earnings ratio may be driven by high dividend payments, it could also be driven by lower earnings, which would mechanically result in lower valuation. The results are presented in Table 9.

Columns (1) and (5) of Table 9 show that, consistent with asset price theory, firms with good growth potential receive higher valuation, *Sales Growth Decile* is significantly positive. This valuation premium, however, is weakened in low protection countries. Interestingly, *3-Year High Dividends* dummy enters with a significantly positive sign, suggesting that, controlling for growth, more dividend payouts are associated with better valuation. As expected, our main coefficient of interest, the three-way interaction between *Low Protection*, *Sales Growth*, and *3-Year High Dividends* is significantly positive (at the 10% and 5% levels for the two investor protection measures).

Given that growth firms that are equity dependent are likely to benefit most from reputation building, in columns (2) and (6) of Table 9, we further include a four-way interaction of *Equity Dependence Decile* with *Low Protection*Sales Growth Decile*3-year High Dividend.* It is significantly positive (at the 1% level), whereas the interaction term of *Low Protection*Sales Growth Decile*3-year High Dividend* becomes statistically insignificant. This suggests that the valuation premium identified in column (1) is driven by equity-dependent growth firms.

In columns (3), (4), (7) and (8) of Table 9, we base our dividend history measure on whether the firm increases dividend payouts in the previous year and obtain very similar results. Overall, the results in Table 9 support the notion that, in low investor protection countries, reputation building through dividend payouts brings the benefit of higher stock market valuation and allows growth and equity dependent firms to raise financing at a lower cost.

IV.   Assessing the Economic Significance of Reputation Building

We now characterize the economic significance of the commitment mechanism we have uncovered. We first assess the economic magnitude of the cost of the commitment mechanism, in the form of earlier initiation of dividends and higher dividend payout ratios. We consider two hypothetical firms that are otherwise similar but one has a moderate growth with a growth decile of 4 and the other has a high growth with growth decile of 9. The coefficient estimates of *Sales Growth Decile* and its interaction with *Low Protection* are 0.032 and 0.133 respectively (column (1) of Table 2). These estimates imply that if our hypothetical high-growth firm is located in a strong protection country, the chance for it to initiate dividend would be 15% (=1-exp(-0.032*5)) lower than the moderate-growth firm, whereas in low protection countries, the chance is 66% higher (=exp((-0.032+0.133)*5)-1) than the moderate-growth firm. This difference is substantial. The magnitude is similar if we use anti-self-dealing index as the measure of investor protection.

Estimates in column (2) of Table 3 show that our hypothetical high-growth firm, if located in a low protection country, has to pay 7.2 (=1.441*5) percentage points more out of its net earnings as dividends compared with its counterpart in a high protection country. A magnitude that is clearly substantial considering that the unconditional mean of dividend payout ratio is 43% and the median is 26%.

To interpret the economic magnitude of the benefit of reputation building, we turn to the estimates in Tables 7 and 9. In column (2) of Table 7, the coefficient estimates of *Sales Growth Decile*, *Low Protection*Sales Growth Decile*, and its interactions with *3-Year High Dividend* (the three-way interaction) are 0.196, -0.084, and 0.170, respectively. These numbers imply that, using our moderate-growth firm as a benchmark, the high-growth firm would issue 0.98 (=0.196*5) percentage point more equity (as a percent of market cap) in a strong protection country but, due to institutional weakness, only 0.56 (0.98-0.084*5) percentage more in a low protection country. What if the high-growth firm in low protection country has established a good dividend history? The marginal impact is that it would now be able to issue, on average, an additional 0.85 percentage point of equity during the three subsequent years. These magnitudes are economically large given that the unconditional mean issuance is about 2%.

Finally, how about the valuation for firms that have established capital market reputation? Similar to the calculation above, the coefficient estimates in column (2) Table 9, suggest that our high-growth firm, as compared with the moderate-growth firm, commands a valuation premium of 0.4 (=0.082*5) in Tobin's Q. Such a valuation premium is lowered to 0.30 (0.082*5-0.023*5) if the high-growth firm is from a low protection country. However, if the high-growth firm from the low protection country has acquired a reputation by consistently paying out high dividends, the valuation premium would rise by 0.03 (0.005*5), about 10% increase of growth firms' valuation premium in low protection countries.

V.   Conclusions

In this paper, we empirically identify a commitment mechanism, i.e., dividend payouts, which firms use to compensate for country-level weak protection of shareholders. We show that

growth firms in countries where legal protection of outside investors is weak tend to initiate dividends early and pay a higher level of dividends both as compared to their counterparts in strong protection countries and as compared to mature firms in the same legal regime. Such costly commitment brings the benefit of better access to equity markets. In particular, we find that after high-growth and equity dependent firms establish a good dividend history, they are able to raise more equity financing.

Our paper makes two contributions. One is to the law and finance literature. This literature generally presumes that firms are passive recipients of the influence of property rights on their external financing. What has been overlooked is the possibility that firms can mitigates the impact of weak legal protection by credibly committing to better governance and thus establishing a capital market reputation for decent treatment of shareholders. Such a commitment mechanism is important in our understanding of the dynamics of corporate finance under different legal regimes.

Our second contribution is related to our understanding of dividend policies around the world. We show that some of the well-known results from the U.S. experience may not be generalized to other countries and highlight the importance of reputation building in determining corporate dividend policy in countries with weak investor protection.

While we show that firms use dividend policies to compensate for country-level weak institutions, dividends may not be the only way to commitment to good governance. Firms may have other alternative mechanisms, such as cross-listing in the US, choosing one of the Big Four auditors, engaging in more conservative accounting, and enhancing accounting transparency. Evaluating the costs and benefits of these alternative mechanisms is a fruitful direction for future research.

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Figure 1. Dividend Initiation Across Countries with Different Investor Protection
This figure presents conditional probability of initiating dividends across high/low investor protection regimes. High-growth firms are those with sales growth over the past 5 years above the sample median, and Low-growth firms are those with the sales growth below or equal to the sample median.
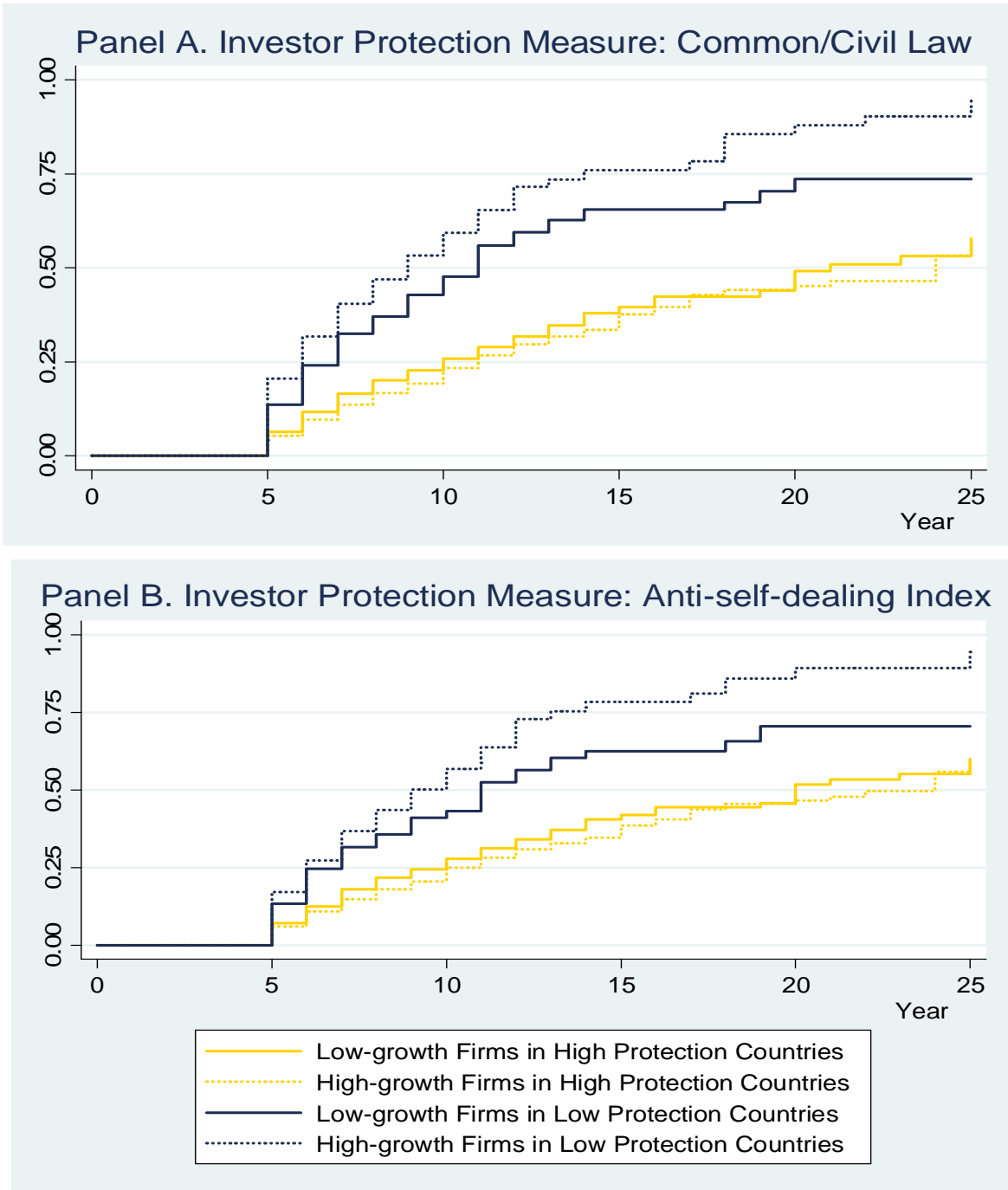
Table 1. Investor Protection and Sample Firm-Year Distribution
This table describe the sample and reports classification of investor protection for each country.

	Country	Number of Firm-Year	Number of Firm	Investor Protection Measure: Common/Civil Law	Investor Protection Measure: Anti-self-dealing Index
		(1)	(2)	(3)	(4)	(5)
1	Argentina	178	49	Low	Low
2	Australia	2,123	429	High	High
3	Austria	334	73	Low	Low
4	Belgium	707	117	Low	High
5	Canada	4,095	755	High	High
6	Denmark	1,165	161	Low	High
7	Egypt	5	5	Low	Low
8	Finland	902	145	Low	High
9	France	4,565	785	Low	Low
10	Germany	3,540	597	Low	Low
11	HongKong	1,316	326	High	High
12	India	301	103	High	High
13	Indonesia	514	134	Low	High
14	Ireland	547	69	High	High
15	Israel	172	64	High	High
16	Italy	1,202	209	Low	Low
17	Japan	13,363	2,215	Low	High
18	Jordan	2	2	Low	Low
19	Malaysia	1,667	376	High	High
20	Mexico	645	109	Low	Low
21	Netherlands	1,656	214	Low	Low
22	New Zealand	394	74	High	High
23	Norway	764	153	Low	Low
24	Pakistan	169	51	High	Low
25	Peru	39	22	Low	Low
26	Philippines	262	66	Low	Low
27	Portugal	306	60	Low	Low
28	Singapore	1,051	252	High	High
29	South Africa	1,717	292	High	High
30	South Korea	883	254	Low	High
31	Spain	929	138	Low	Low
32	SriLanka	61	14	High	Low
33	Sweden	1,561	294	Low	Low
34	Switzerland	1,439	198	Low	Low
35	Taiwan	654	264	Low	High
36	Thailand	979	232	High	High
37	Turkey	319	84	Low	Low
38	UK	10,929	1,597	High	High
39	US	39,537	6,490	High	High
40	Zimbabwe	33	11	High	Low
	Total	101,025	17,483		

Table 2. Summary Statistics

This table presents summary statistics of variables used in this study. Dividend is total dividends paid to common and preferred shareholders. *Net Income* is measured as income before extraordinary items. Sales are net sales. *Issuance* is average annual equity issuance proceeds from year t+1 to t+3. *Tobin's Q* is market capitalization of equity plus total liability over total assets. *Sales Growth* is average annual percentage growth in real net sales over the past 5 years. *Equity Dependence* is constructed following Rajan and Zingales' (1998) method. For a specific industry-year, it is defined as previous ten years' industry aggregate net equity sales proceeds normalized by industry aggregate capital expenditure using U.S. firm-level data. *Leverage* is total liability divided by total assets. *ROA* is income before extraordinary items over total assets. Significance of difference at the 1%, 5% and 10% levels is indicated by ***, ** and * respectively.

		Whole Sample	Investor Protection Measure: Common/Civil Law			Investor Protection Measure: Anti-self-dealing Index		
			High Protection Countries	Low Protection Countries	Difference	High Protection Countries	Low Protection Countries	Difference
		(1)	(2)	(3)	(2) - (3)	(4)	(5)	(4) - (5)
Dividend Payout								
Dividend / Net Income (%)	Mean	42.688	40.696	46.296	-5.6***	42.573	43.22	-0.647
	Median	26.075	24.809	27.742	-2.933***	25.576	28.083	-2.507***
Dividend / Sales (%)	Mean	1.943	2.265	1.359	0.906***	1.992	1.715	0.277***
	Median	0.898	1.129	0.732	0.397***	0.883	0.953	-0.07
Equity Issuance and Valuation								
Equity Issuance/Market Cap	Mean	2.57%	2.96%	1.87%	1.09%***	2.67%	2.09%	0.59%***
	Median	0.00%	0.00%	0.00%	0.00%*** [1]	0.00%	0.00%	0.00%***[1]
Tobin's Q	Mean	1.543	1.677	1.305	0.372***	1.577	1.386	0.191***
	Median	1.247	1.344	1.124	0.220***	1.267	1.170	0.097***
Firm Characteristics								
Sales Growth(%)	Mean	17.583	20.69	11.973	8.717***	17.577	17.614	-0.037
	Median	5.501	6.581	3.719	2.862***	5.315	6.417	-1.102***
Total Assets (Billons of USD)	Mean	2775	2634	3030	-396***	2688	3177	-489***
	Median	426	352	560	-208***	414	482	-68***
Leverage	Mean	0.525	0.499	0.573	-0.074***	0.512	0.587	-0.075***
	Median	0.538	0.51	0.587	-0.077***	0.523	0.602	-0.079***
Equity Dependence	Mean	0.089	0.099	0.07	0.029***	0.09	0.085	0.005***
	Median	0.079	0.085	0.057	0.028***	0.079	0.074	0.005***
ROA	Mean	0.059	0.069	0.041	0.028***	0.061	0.051	0.01***
	Median	0.047	0.056	0.03	0.026***	0.048	0.04	0.008***

Note [1]: Median of *Equity Issuance/Market Cap* is 0.00%, based on rounded numbers, as issuance is a relatively small number compared with market cap. Median issuance measures are significantly larger in the High Protection countries than in Low Protection countries.

Table 3. Dividend Payout by Growth Decile and Investor Protection

Panel A presents the proportion of dividend-paying firms across countries with different levels of investor protection. Panel B presents the dividend payout ratios across countries with different levels of investor protection. *Sales Growth Decile* is rank decile for sales growth over the past 5 years. *Net Income* is measured as income before extraordinary items. Sales are net sales. Significance of difference at the 1%, 5% and 10% levels is indicated by ***, ** and * respectively.

Panel A: Proportion of dividend-paying firms across growth deciles

Growth Decile	Investor Protection Measure: Civil/common Law			Investor Protection Measure: Anti-self-dealing Index		
	Low Protection Countries	High Protection Countries	Difference	Low Protection Countries	High Protection Countries	Difference
	(1)	(2)	(1) - (2)	(3)	(4)	(3) - (4)
0 (Low-growth firms	61.5%	62.1%	-0.6%	56.3%	62.8%	-6.5%***
1	79.7%	75.1%	4.6%***	73.0%	78.7%	-5.7%***
2	85.4%	78.9%	6.5%***	79.3%	83.1%	-3.8%***
3	88.2%	80.5%	7.7%***	84.4%	83.9%	0.5%
4	88.6%	79.9%	8.7%***	86.1%	83.5%	2.6%***
5	88.8%	77.8%	11.0%***	85.4%	81.9%	3.5%***
6	88.0%	74.1%	13.9%***	86.7%	78.5%	8.2%***
7	89.5%	69.8%	19.7%***	86.2%	74.1%	12.1%***
8	86.9%	61.1%	25.8%***	83.1%	66.0%	17.1%***
9 (Growth firms)	77.3%	45.2%	32.1%***	71.4%	49.2%	22.2%***

Panel B: dividend payout ratio across growth deciles

Growth Decile	Investor Protection Measure: Civil/common Law						Investor Protection Measure: Anti-self-dealing Index					
	Dividend/Net Income			Dividend/Sales			Dividend/Net Income			Dividend/Sales		
	Low Protection Countries	High Protection Countries	Difference	Low Protection Countries	High Protection Countries	Difference	Low Protection Countries	High Protection Countries	Difference	Low Protection Countries	High Protection Countries	Difference
	(1)	(2)	(1) - (2)	(3)	(4)	(3) - (4)	(5)	(6)	(5) - (6)	(7)	(8)	(7) - (8)
0 (Mature firms)	45.5%	51.3%	-5.8%***	1.5%	2.6%	-1.1%***	42.5%	52.2%	-9.7%***	2.0%	2.3%	-0.3%***
1	55.8%	56.5%	-0.7%	1.1%	2.6%	-1.5%***	46.8%	57.6%	-10.8%***	1.7%	2.0%	-0.3%***
2	50.6%	55.0%	-4.4%***	1.1%	2.8%	-1.7%***	48.9%	54.7%	-5.8%***	1.8%	2.2%	-0.4%***
3	52.4%	49.3%	3.1%***	1.1%	2.7%	-1.6%***	50.5%	50.5%	0.0%	1.8%	2.2%	-0.4%***
4	50.5%	43.9%	6.6%***	1.3%	2.6%	-1.3%***	47.2%	46.6%	0.6%	1.8%	2.2%	-0.4%***
5	47.0%	39.2%	7.8%***	1.3%	2.4%	-1.1%***	42.8%	42.0%	0.8%	1.7%	2.2%	-0.5%***
6	44.8%	35.2%	9.6%***	1.5%	2.2%	-0.7%***	40.9%	38.9%	2.0%	1.8%	2.0%	-0.2%***
7	42.0%	31.7%	10.3%***	1.5%	1.9%	-0.4%***	41.5%	34.1%	7.4%***	1.7%	1.9%	-0.2%***
8	39.3%	27.1%	12.3%***	1.6%	1.7%	-0.1%	38.3%	29.2%	9.1%***	1.6%	1.7%	-0.1%**
9 (Growth firms)	35.1%	18.9%	16.2%***	1.5%	1.2%	0.3%***	33.1%	21.0%	12.1%***	1.3%	1.3%	0.0%

Table 4. Cox Proportional Hazard Model - Dividend Initiation

This table presents analysis of firms' dividend initiation tendency using Cox proportional hazard model. The dependent variable is coded as one if a firm pays dividend in the given year and zero otherwise. A positive coefficient indicates an accelerating effect on dividend initiation. Only observations up to the firm's dividend initiation are used in this model; if a has not initiated dividend by the end of sample period, all the observations for that firm will be used. *Sales Growth Decile* is the rank decile for sales growth over the past 5 years. *Leverage* is measured as total liability divided by total assets. *ROA* is defined as income before extraordinary items over total assets. *Overall Impact of High Sales Growth in Low Protection Countries* is the sum of coefficients on *Sales Growth Decile* and its interaction with the investor protection measure. Industry is classified based on two-digit SIC code. Heteroskedasticity-consistent standard errors clustered by industry*year dummies are presented in parentheses. Significance at the 1%, 5% and 10% levels is indicated by ***, ** and * respectively.

	Investor Protection Measure: Common/Civil Law	Investor Protection Measure: Anti-self-dealing Index
	(1)	(2)
Sales Growth Decile	-0.032**	-0.024*
	(0.015)	(0.014)
Low Protection*Sales Growth Decile	0.133***	0.116***
	(0.034)	(0.039)
log(Assets)	0.247***	0.246***
	(0.026)	(0.026)
Leverage	-0.397**	-0.387**
	(0.184)	(0.184)
ROA	4.243***	4.259***
	(0.539)	(0.538)
Overall Impact of High Sales Growth in Low Protection Countries	0.101***	0.092**
(p-values)	(0.002)	(0.012)
Country*Year Dummies	Yes	Yes
Industry*Year Dummies	Yes	Yes
Number of Observations	14,058	14,058

Table 5. Firm Growth and Dividend Payout

This table presents the effects firm growth on dividend payout ratios. The dependent variables are *Dividend to Net Income* and *Dividend to Sales*. Net Income is measured as income before extraordinary items. Sales are net sales. *Sales Growth Decile* is the rank decile for sales growth over the past 5 years. *High Growth* is a dummy equal to 1 if sales growth is above the yearly median and 0 otherwise. *Equity Dependence Decile* is the rank decile for equity dependence, where equity dependence is constructed following Rajan and Zingales' (1998) method. For a specific industry-year, it is defined as previous ten years' industry aggregate net equity sales proceeds normalized by industry aggregate capital expenditure using U.S. firm-level data. Leverage is measured as total liability divided by total assets. *ROA* is measured as income before extraordinary items over total assets. *Overall Impact of High Growth and Equity Dependence in Low Protection Countries* is the sum of coefficients on *High Growth* and 6 times the coefficient on *Low Protection*High Growth*Equity Dependence Decile*. Industry is classified based on two-digit SIC code. Heteroskedasticity-consistent standard errors clustered by industry*year dummies are presented in parentheses. Significance at the 1%, 5% and 10% levels is indicated by ***, ** and * respectively.

	Investor Protection Measure: Common/Civil Law				Investor Protection Measure: Anti-self-dealing Index			
	Dividend/Net Income		Dividend/Sales		Dividend/Net Income		Dividend/Sales	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sales Growth Decile	-2.985***	-2.823***	-0.177***	-0.194***	-2.915***	-2.861***	-0.159***	-0.182***
	(0.125)	(0.191)	(0.007)	(0.010)	(0.116)	(0.185)	(0.006)	(0.009)
Low Protection*Sales Growth Decile	1.441***	0.951***	0.108***	0.094***	1.930***	1.538***	0.071***	0.059***
	(0.213)	(0.268)	(0.008)	(0.010)	(0.240)	(0.295)	(0.010)	(0.013)
High Growth		-1.267		0.088**		-0.647		0.123***
		(0.969)		(0.042)		(0.949)		(0.040)
Low Protection*High Growth*Equity Dependence Decile		0.726***		0.034***		0.636***		0.035***
		(0.192)		(0.009)		(0.233)		(0.010)
log(Assets)	2.263***	2.218***	0.297***	0.294***	2.280***	2.243***	0.298***	0.296***
	(0.169)	(0.176)	(0.010)	(0.010)	(0.170)	(0.177)	(0.010)	(0.010)
Leverage	-14.046***	-13.675***	-2.498***	-2.482***	-14.174***	-13.781***	-2.497***	-2.481***
	(1.772)	(1.830)	(0.081)	(0.083)	(1.778)	(1.838)	(0.082)	(0.083)
ROA	-299.836***	-304.738***	13.885***	13.824***	-299.104***	-303.864***	13.910***	13.859***
	(11.312)	(12.250)	(0.473)	(0.495)	(11.334)	(12.276)	(0.471)	(0.492)
Overall Impact of High Growth and Equity Dependence in Low Protection Countries		3.089**		0.292***		3.169**		0.333***
(p-values)		(0.020)		(<0.001)		(0.043)		(<0.001)
Country*Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry*Year Dummies	Yes	No	Yes	No	Yes	No	Yes	No
R-squared	0.13	0.13	0.31	0.32	0.13	0.13	0.32	0.32
Number of Observations	100,154	93,703	100,154	93,703	100,154	93,703	100,154	93,703

Table 6. Subsequent Equity Issuance of Firms With and Without Good Dividend History

This table presents differences in subsequent three-year equity issuance for firms with and without good dividend history across the two legal regimes. *Issuance /market cap* is the average annual equity issuance proceeds from year t+1 to t+3 normalized by market capitalization at year t end. Significance at the 1%, 5% and 10% levels is indicated by ***, ** and * respectively.

	Investor Protection Measure: Common/Civil Law							investor protection measure2: antiself-dealing index						
	Low Protection Countries			High Protection Countries			Diff-in-diff	Low Protection Countries			High Protection Countries			Diff-in-diff
	Good DIV history	Without good DIVhistory	Diff (=(1)-(2))	Good DIV history	Without good DIVhistory	Diff (=(4)-(5))		Good DIV history	Without good DIVhistory	Diff (=(7)-(8))	Good DIV history	Without good DIVhistory	Diff (=(10)-(11))	
	(1)	(2)	(3)	(4)	(5)	(6)	[(3)-(6)]	(7)	(8)	(9)	(10)	(11)	(12)	[(9)-(12)]
Panel A. Dividend history is measured based on three year above industry payout ratios														
Panel A.1 Payout ratio is measured as dividend/net income														
Proportion of issuing firms	9.49%	10.13%	-0.64%*	10.02%	12.99%	-2.98%***	2.34%***	11.15%	9.95%	1.19%**	9.60%	12.32%	-2.72%***	3.91%***
Issuance / market cap	1.64%	1.94%	-0.29%***	2.01%	3.35%	-1.34%***	1.05%***	2.05%	2.11%	-0.06%	1.87%	2.96%	-1.09%***	1.03%***
Panel A.2 Payout ratio is measured as dividend/sales														
Proportion of issuing firms	9.32%	10.25%	-0.93%***	10.25%	13.04%	-2.79%***	1.86%***	10.40%	10.22%	0.18%	9.87%	12.37%	-2.50%***	2.68%***
Issuance / market cap	1.42%	2.05%	-0.63%***	1.91%	3.48%	-1.57%***	0.94%***	1.81%	2.22%	-0.40%***	1.74%	3.09%	-1.36%***	0.95%***
Panel B. Dividend history is measured based on recent increases in payout ratios														
Panel B.1 Payout ratio is measured as dividend/net income														
Proportion of issuing firms	9.32%	10.49%	-1.17%***	11.22%	12.58%	-1.36%***	0.18%	10.23%	10.31%	-0.08%	10.51%	12.20%	-1.69%***	1.61%***
Issuance / market cap	1.60%	2.08%	-0.48%***	2.29%	3.31%	-1.02%***	0.54%***	1.91%	2.23%	-0.31%**	2.03%	3.03%	-1.00%***	0.69%***
Panel B.2 Payout ratio is measured as dividend/sales														
Proportion of issuing firms	9.90%	10.07%	-0.17%	11.18%	12.65%	-1.46%***	1.29%***	10.44%	10.12%	0.32%	10.71%	12.13%	-1.42%***	1.74%***
Issuance / market cap	1.63%	2.08%	-0.44%***	2.30%	3.33%	-1.03%***	0.58%***	1.91%	2.25%	-0.33%***	2.06%	3.05%	-0.99%***	0.66%***

Table 7. Dividend Payment History and Subsequent Equity Issuances

This table presents the effects of dividend payment history on subsequent equity issuances. The dependent variable is average annual equity issuance proceeds from year t+1 to t+3 scaled by market capitalization at year t end. 3-*Year High Dividend* is a dummy equals 1 if the dividend ratio is above the yearly industry median in the given country for previous 3 years (year t-2 to t), and zero otherwise. Sales Growth Decile is rank decile for sales growth over the past 5 years. Equity Dependence Decile is rank decile for Equity Dependence, where equity dependence is constructed following Rajan and Zingales' (1998) method. For a specific industry-year, it is defined as previous ten years' industry aggregate net equity sales proceeds normalized by industry aggregate capital expenditure using U.S. firm-level data. *Leverage* is measured as total liability divided by total assets. *ROA* is income before extraordinary items over total assets. *Overall Impact of High Dividend and High Sales Growth in Low Protection Countries* is the sum of coefficient on 3-year *High Dividend* and 7 times the coefficient on Low Protection*3-Year High Dividend*Sales Growth Decile. Industry is classified based on two-digit SIC code. Heteroskedasticity-consistent standard errors presented in parentheses are clustered by industry*year dummies if they are included in the model, and clustered by country*year dummies otherwise. Significance at the 1%, 5% and 10% levels is indicated by ***, ** and * respectively.

	Investor Protection Measure: Common/Civil Law						Investor Protection Measure: Anti-self-dealing Index					
	Dividend/Net Income			Dividend/Sales			Dividend/Net Income			Dividend/Sales		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Dividend Ratio	-0.003***	-0.003***	-0.004***	-0.092***	-0.092***	-0.067***	-0.003***	-0.003***	-0.004***	-0.097***	-0.096***	-0.068***
	(0.000)	(0.000)	(0.001)	(0.013)	(0.013)	(0.015)	(0.000)	(0.000)	(0.001)	(0.013)	(0.013)	(0.015)
3-Year High Dividend	-0.900***	-0.871***	-0.774***	-0.915***	-0.830***	-0.825***	-0.840***	-0.796***	-0.773***	-0.795***	-0.724***	-0.795***
	(0.092)	(0.084)	(0.083)	(0.088)	(0.078)	(0.089)	(0.078)	(0.076)	(0.079)	(0.072)	(0.070)	(0.085)
Sales Growth Decile	0.181***	0.196***	0.203***	0.176***	0.190***	0.201***	0.181***	0.189***	0.203***	0.177***	0.186***	0.202***
	(0.015)	(0.018)	(0.018)	(0.015)	(0.018)	(0.019)	(0.015)	(0.017)	(0.018)	(0.015)	(0.017)	(0.019)
Low Protection*3-Year High Dividend	0.789***			0.855***			1.092***			1.016***		
	(0.135)			(0.124)			(0.176)			(0.156)		
Low Protection*Sales Growth Decile		-0.084***			-0.083***			-0.085**			-0.083**	
		(0.027)			(0.028)			(0.034)			(0.035)	
Low Protection*3-Year High Dividend*Sales Growth Decile		0.170***			0.149***			0.184***			0.133***	
		(0.028)			(0.023)			(0.033)			(0.028)	
Equity Dependence Decile			0.090***			0.091***			0.077***			0.078***
			(0.019)			(0.019)			(0.015)			(0.015)
Low Protection*Equity Dependence Decile			-0.060**			-0.064**			-0.051*			-0.048*
			(0.026)			(0.027)			(0.028)			(0.029)
Low Protection*3-Year High Dividend*Equity Dependence Deci			0.092***			0.090***			0.159***			0.128***
			(0.033)			(0.031)			(0.039)			(0.036)
log(Assets)	-0.335***	-0.335***	-0.306***	-0.303***	-0.304***	-0.271***	-0.337***	-0.338***	-0.307***	-0.305***	-0.306***	-0.271***
	(0.023)	(0.023)	(0.037)	(0.023)	(0.023)	(0.037)	(0.023)	(0.023)	(0.037)	(0.023)	(0.023)	(0.037)
Leverage	3.804***	3.788***	3.747***	3.530***	3.483***	3.477***	3.804***	3.801***	3.739***	3.449***	3.448***	3.439***
	(0.213)	(0.212)	(0.321)	(0.217)	(0.215)	(0.326)	(0.213)	(0.213)	(0.320)	(0.215)	(0.215)	(0.326)
ROA	-8.889***	-8.919***	-8.659***	-5.971***	-6.069***	-6.007***	-8.978***	-9.006***	-8.715***	-6.042***	-6.093***	-6.052***
	(0.831)	(0.831)	(0.937)	(0.831)	(0.833)	(0.972)	(0.832)	(0.833)	(0.940)	(0.834)	(0.838)	(0.973)
Overall Impact of High Dividend and High Sales Growth in Low Protection Countries		0.319**			0.213*			0.488**			0.207	
(p-values)		(0.051)			(0.100)			(0.024)			(0.245)	
Country*Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry*Year Dummies	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No
R-squared	0.06	0.06	0.04	0.06	0.06	0.04	0.06	0.06	0.04	0.06	0.06	0.04
Number of Observations	96,864	96,864	90,662	96,864	96,864	90,662	96,864	96,864	90,662	96,864	96,864	90,662

Table 8. Recent Dividend Increase and Subsequent Equity Issuances

This table presents the effects of recent dividend increase (in the previous year) on subsequent equity issuances. The dependent variable is average annual equity issuance proceeds from year t+1 to t+3 scaled by market capitalization at year t end. 3-*Year High Dividend* is a dummy equals 1 if the dividend ratio is above the yearly industry median in the given country for previous 3 years (year t-2 to t), and zero otherwise. Sales Growth Decile is rank decile for sales growth over the past 5 years. Equity Dependence Decile is rank decile for Equity Dependence, where equity dependence is constructed following Rajan and Zingales' (1998) method. For a specific industry-year, it is defined as previous ten years' industry aggregate net equity sales proceeds normalized by industry aggregate capital expenditure using U.S. firm-level data. *Leverage* is measured as total liability divided by total assets. *ROA* is income before extraordinary items over total assets. *Overall Impact of High Dividend and High Sales Growth in Low Protection Countries* is the sum of coefficient on 3-year *High Dividend* and 7 times the coefficient on Low Protection*3-Year High Dividend*Sales Growth Decile. Industry is classified based on two-digit SIC code. Heteroskedasticity-consistent standard errors presented in parentheses are clustered by industry*year dummies if they are included in the model, and clustered by country*year dummies otherwise. Significance at the 1%, 5% and 10% levels is indicated by ***, ** and * respectively.

	Investor Protection Measure: Common/Civil Law						Investor Protection Measure: Anti-self-dealing Index					
	Dividend/Net Income			Dividend/Sales			Dividend/Net Income			Dividend/Sales		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Dividend Ratio	-0.003***	-0.003***	-0.003***	-0.108***	-0.108***	-0.078***	-0.003***	-0.003***	-0.003***	-0.111***	-0.110***	-0.079***
	(0.000)	(0.000)	(0.001)	(0.013)	(0.013)	(0.014)	(0.000)	(0.000)	(0.001)	(0.013)	(0.013)	(0.014)
Dividend Increase	-0.837***	-0.786***	-0.742***	-0.544***	-0.483***	-0.503***	-0.684***	-0.653***	-0.693***	-0.450***	-0.389***	-0.471***
	(0.099)	(0.089)	(0.085)	(0.101)	(0.089)	(0.082)	(0.079)	(0.078)	(0.079)	(0.078)	(0.077)	(0.079)
Sales Growth Decile	0.191***	0.206***	0.212***	0.177***	0.190***	0.201***	0.192***	0.201***	0.213***	0.178***	0.187***	0.202***
	(0.015)	(0.018)	(0.018)	(0.015)	(0.018)	(0.019)	(0.015)	(0.017)	(0.018)	(0.015)	(0.017)	(0.019)
Low Protection*Dividend Increase	0.679***			0.545***			0.579***			0.644***		
	(0.139)			(0.141)			(0.161)			(0.155)		
Low Protection*Sales Growth Decile		-0.106***			-0.086***			-0.087**			-0.079**	
		(0.029)			(0.030)			(0.037)			(0.037)	
Low Protection*Sales Growth Decile*Dividend Increase		0.132***			0.097***			0.088***			0.071**	
		(0.025)			(0.026)			(0.031)			(0.030)	
Equity Dependence Decile			0.078***			0.081***			0.069***			0.071***
			(0.019)			(0.020)			(0.015)			(0.016)
Low Protection*Equity Dependence Decile			-0.065**			-0.058**			-0.044			-0.039
			(0.028)			(0.029)			(0.031)			(0.033)
Low Protection*Equity Dependence Decile*Dividend Increase			0.083***			0.058**			0.093***			0.071**
			(0.030)			(0.029)			(0.035)			(0.036)
log(Assets)	-0.352***	-0.352***	-0.315***	-0.333***	-0.332***	-0.295***	-0.355***	-0.355***	-0.317***	-0.335***	-0.335***	-0.296***
	(0.023)	(0.023)	(0.037)	(0.023)	(0.023)	(0.037)	(0.023)	(0.023)	(0.037)	(0.023)	(0.023)	(0.037)
Leverage	3.817***	3.791***	3.751***	3.653***	3.637***	3.668***	3.792***	3.791***	3.731***	3.635***	3.633***	3.653***
	(0.214)	(0.213)	(0.318)	(0.216)	(0.217)	(0.326)	(0.213)	(0.213)	(0.318)	(0.217)	(0.217)	(0.327)
ROA	-9.202***	-9.237***	-8.998***	-6.183***	-6.256***	-6.317***	-9.237***	-9.261***	-9.034***	-6.216***	-6.253***	-6.343***
	(0.840)	(0.839)	(0.947)	(0.835)	(0.836)	(0.986)	(0.840)	(0.841)	(0.949)	(0.836)	(0.839)	(0.985)
Overall Impact of Dividend Increase and High Sales Growth in Low Protection Countries		0.268*			0.291*			0.051			0.178	
(p-values)		(0.094)			(0.075)			(0.819)			(0.413)	
Country*Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry*Year Dummies	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No
R-squared	0.06	0.06	0.04	0.06	0.06	0.04	0.06	0.06	0.04	0.06	0.06	0.04
Number of Observations	96,864	96,864	90,662	96,864	96,864	90,662	96,864	96,864	90,662	96,864	96,864	90,662

Table 9. Dividend History and Firm Valuation

This table presents the effects of dividend history on firm stock market valuation. The dependent variables are Tobin's Q, defined as market capitalization of equity plus total liability over total assets. Sales are net sales. *Sales Growth Decile* is the rank decile for sales growth over the past 5 years. *3-Year High Dividend* is a dummy equals 1 if the dividend ratio is above the yearly industry median in the given country for previous 3 years (year t-2 to t), and zero otherwise. *Dividend Increase* is a dummy equal to 1 if the dividend ratio is higher than the one of the previous year and zero otherwise. *Equity Dependence Decile* is the rank decile for equity dependence, where equity dependence is constructed following Rajan and Zingales' (1998) method. For a specific industry-year, it is defined as previous ten years' industry aggregate net equity sales proceeds normalized by industry aggregate capital expenditure using U.S. firm-level data. *Leverage* is defined as total liability divided by total assets. Industry is classified based on two-digit SIC code. Heteroskedasticity-consistent standard errors clustered by industry*year dummies are presented in parentheses. Significance at the 1%, 5% and 10% levels is indicated by ***, ** and * respectively.

	Investor Protection Measure: Common/Civil Law				Investor Protection Measure: Anti-self-dealing Index			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dividend/Sales	0.052***	0.052***	0.056***	0.055***	0.052***	0.052***	0.055***	0.055***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Sales Growth Decile	0.082***	0.082***	0.082***	0.082***	0.081***	0.081***	0.080***	0.080***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Low Protection*Sales Growth Decile	-0.023***	-0.023***	-0.025***	-0.025***	-0.029***	-0.029***	-0.030***	-0.030***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
3-year High dividend/sales dummy	0.089***	0.090***			0.092***	0.092***		
	(0.010)	(0.010)			(0.009)	(0.009)		
Low Protection*Sales Growth Decile*3-year-High-Dividend/Sales	0.005*	-0.005			0.006**	-0.002		
	(0.003)	(0.004)			(0.003)	(0.004)		
Low Protection*Sales Growth Decile*3-year-High-Dividend/Sales*Equity Dependence Decile		0.003***				0.002*		
		(0.001)				(0.001)		
Dividend/Sales increase dummy			0.008	0.008			0.013*	0.013*
			(0.008)	(0.008)			(0.007)	(0.007)
Low Protection*Sales Growth Decile*Dividend/Sales Increase			0.007***	-0.004			0.006**	-0.004
			(0.002)	(0.003)			(0.003)	(0.004)
Low Protection*Sales Growth Decile*Dividend/Sales Increase*Equity Dependence Decile				0.003***				0.002***
				(0.001)				(0.001)
log(Assets)	-0.016***	-0.016***	-0.011**	-0.011**	-0.016***	-0.016***	-0.011**	-0.011**
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Leverage	-0.159***	-0.161***	-0.193***	-0.194***	-0.159***	-0.159***	-0.192***	-0.192***
	(0.034)	(0.034)	(0.034)	(0.034)	(0.034)	(0.034)	(0.034)	(0.034)
R&D Expenses /Assets	6.919***	6.929***	6.888***	6.902***	6.925***	6.927***	6.898***	6.903***
	(0.337)	(0.337)	(0.337)	(0.337)	(0.337)	(0.337)	(0.337)	(0.337)
Country*Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry*Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Number of Observations	90,663	90,663	90,663	90,663	90,663	90,663	90,663	90,663